

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Roger LE COMPTE, et. al. Group Art Unit: (not assigned)

Serial No.: (not assigned)

Filed: (herewith)

For: DEVICE FOR PROCESSING SAMPLES
OF BLOOD PRODUCTS

PRELIMINARY AMENDMENT

Honorable Commissioner of
Patents and Trademarks
Washington, DC 20231

Sir:

Please amend the above-captioned patent application as follows:

IN THE CLAIMS:

3. Device according to claim 1, characterized in that the tubes (18) are placed vertically in the cassette (12) and in line with the direction of travel, and in that the means of agitation (30) are arranged to withdraw at least one tube (18) laterally from the cassette and to replace it laterally into the cassette after agitation.

4. Device according to claim 1, characterized in that the cassette (12) incorporates flexible U-clips (44) allowing the removal and replacement of a tube by a lateral movement

parallel to itself or by an axial movement of the tube along the axis of the latter.

5. Device according to claim 1, characterized in that the pick-up mechanism (32) or each such mechanism is capable of being driven in continuous rotation by a motor (88), thereby effecting continuous agitation by turning the tube through a complete revolution.

6. Device according to claim 1, characterized in that the means of agitation (30) incorporate a mobile head (100) carrying the pick-up mechanism(s) (32) and which is capable of being driven in linear or rotational motion by means of a coupling arrangement (96) connected to a motor (88) with two directions of rotation.

9. Device according to claim 6, characterized in that the rotational movement of the mobile head (100) is a continuous and complete rotation in the direction of the screw-in action of the coupling arrangement (96).

10. Device according to claim 6, characterized in that it includes an arrangement for opening and closing the pick-up mechanism (32) which is capable of being actuated in a translational motion by the coupling arrangement (96) once the

latter has arrived at a stop position at the end of the screw-out motion, with the mobile head (100) being prevented from rotating by the locking means (132, 133).

12. Device according to claim 1, characterized in that it includes a means of manual loading (82) placed in proximity to the transfer means (10) and designed to hold at least one tube (18) and to place this tube in the path of the transfer means and sampling means, when no cassette is present, to enable the collection of a sample by the sampling means (34).

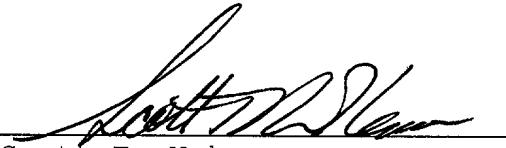
14. Device according to claim 1, characterized in that the sampling means (34) include a carriage (146) supporting the piercing device and sampling needle (148), and in that the carriage is movable between a sampling position, at which the piercing device pierces the tube bung and the sampling needle draws off a total specimen quantity, and at least one distribution position at which the sampling needle expels the said total specimen quantity, or part thereof, into a receptacle such as a reagent vessel.

15. Device according to claim 1, characterized in that it additionally includes a cassette loading station (14) and a cassette unloading station (16) placed respectively upstream and downstream of the transfer means (10).

REMARKS

By the above amendment, all multiple dependencies have been removed from the claims to place the application in better form for examination. An action on the merits is respectfully requested.

Respectfully submitted,
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IN THE CLAIMS:

3. Device according to claim 1 [claims 1 and 2], characterized in that the tubes (18) are placed vertically in the cassette (12) and in line with the direction of travel, and in that the means of agitation (30) are arranged to withdraw at least one tube (18) laterally from the cassette and to replace it laterally into the cassette after agitation.

4. Device according to claim 1 [claims 1 to 3], characterized in that the cassette (12) incorporates flexible U-clips (44) allowing the removal and replacement of a tube by a lateral movement parallel to itself or by an axial movement of the tube along the axis of the latter.

5. Device according to claim 1 [any of claims 1 to 4], characterized in that the pick-up mechanism (32) or each such mechanism is capable of being driven in continuous rotation by a motor (88), thereby effecting continuous agitation by turning the tube through a complete revolution.

6. Device according to claim 1 [any of claims 1 to 5], characterized in that the means of agitation (30) incorporate a mobile head (100) carrying the pick-up mechanism(s) (32) and which is capable of being driven in linear or rotational

motion by means of a coupling arrangement (96) connected to a motor (88) with two directions of rotation.

9. Device according to claim 6 [any of claims 6 to 8], characterized in that the rotational movement of the mobile head (100) is a continuous and complete rotation in the direction of the screw-in action of the coupling arrangement (96).

10. Device according to claim 6 [any of claims 6 to 9], characterized in that it includes an arrangement for opening and closing the pick-up mechanism (32) which is capable of being actuated in a translational motion by the coupling arrangement (96) once the latter has arrived at a stop position at the end of the screw-out motion, with the mobile head (100) being prevented from rotating by the locking means (132, 133).

12. Device according to claim 1 [any of claims 1 to 11], characterized in that it includes a means of manual loading (82) placed in proximity to the transfer means (10) and designed to hold at least one tube (18) and to place this tube in the path of the transfer means and sampling means, when no cassette is present, to enable the collection of a sample by the sampling means (34).

14. Device according to claim 1 [any of claims 1 to 13], characterized in that the sampling means (34) include a carriage (146) supporting the piercing device and sampling needle (148), and in that the carriage is movable between a sampling position, at which the piercing device pierces the tube bung and the sampling needle draws off a total specimen quantity, and at least one distribution position at which the sampling needle expels the said total specimen quantity, or part thereof, into a receptacle such as a reagent vessel.

15. Device according to claim 1 [any of claims 1 to 14], characterized in that it additionally includes a cassette loading station (14) and a cassette unloading station (16) placed respectively upstream and downstream of the transfer means (10).

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